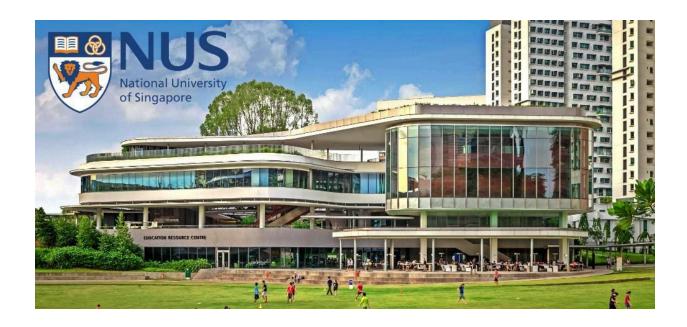
English



Openings at CoSTA@NUS Lab

About **CoSTA@NUS** Lab:

Cognitive **S**cience & **T**rustworthy **A**I (CoSTA@NUS) Lab stands at the "cognitive coastline" — a frontier where human minds meet machine intelligence. The lab seeks to navigate the uncharted waters of AI, guided by cognitive science and a commitment to safe, ethical innovation.

- Cognitive Science of AI: We aim to understand the inner workings and vulnerabilities of AI systems through the lens of cognitive psychology and neuroscience.
- Al for Cognitive Health: We leverage Al to simulate cognitive symptoms, advance our understanding, and treatment of cognitive disorders.
- **Al Safety**: We are dedicated to developing fundamental computational methodologies for accountable and interpretable Al safety, including risk quantification and mitigation.

About PI:

<u>Junyuan "Jaosn" Hong</u> is an incoming Assistant Professor at <u>the ECE department of the National University of Singapore</u> and currently works at <u>Massachusetts General Hospital</u> & <u>Harvard Medical School</u>. Previously, he was a postdoctoral fellow advised by <u>Dr. Atlas Wang</u> in the Institute for Foundations of Machine Learning (<u>IFML</u>). He has been recognized as one of the <u>MLSys Rising Stars</u> in 2024 and received a <u>Best Paper Nomination at VLDB 2024</u>, and some of his work was covered by <u>The White House</u>, and <u>MSU Office of Research and Innovation</u>.

Openings:

2-3 fully-funded Ph.D. positions (scholarship/RA, 2026 Fall) available in the lab. For excellent students, I am happy to nominate/endorse you to apply for the President's Graduate Fellowship (PGF), AISG PhD Fellowship, and scholarships provided by other agencies, such as A*STAR Scholarship, SINGA, etc. Find details at NUS scholarships.

• Multiple **remote internships** available if you are interested in pursuing PhD in our lab.

About NUS ECE:

The Department of Electrical and Computer Engineering (*QS2025 #4*) at the National University of Singapore (*QS2025 #8*), housed under the dynamic College of Design and Engineering (CDE), offers a world-class environment at the forefront of innovation in electronics, computing, robotics, IoT, and sustainable technologies.

What We Offer:

- Hands-on and personalized mentorship for cutting-edge research. Many prior mentees have multiple publications in ML/NLP top conferences and have secured jobs in the industry.
- **Collaboration:** Opportunities to collaborate with leading researchers at worldwide top universities (NUS, UT Austin, Harvard, UMich, UIUC, MIT, Princeton, etc.).
- Computation resources: University cluster (48x H100 GPU, 102x A40 GPU). More lab resources will be available in Fall 2026.

Who We're Looking For:

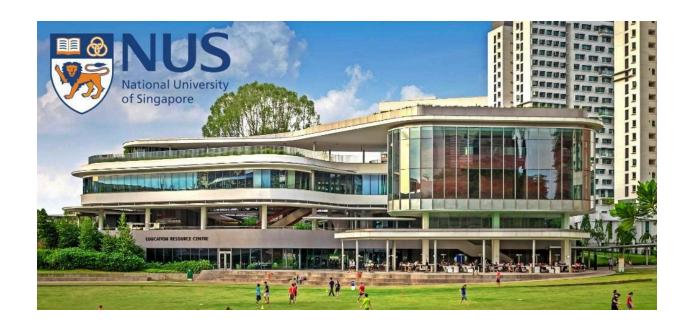
We are seeking individuals with a strong background in Al/ML, cognitive science (neuroscience | psychology) or related fields. Ideal candidates will have:

- Excellent problem-solving (coding or math) and analytical skills.
- Ability to work independently and good communication skills to work collaboratively.
- Qualification for scholarships (meaning a solid academic record) will be prioritized.
- (optional) Demonstrated research experience and insights into relevant papers.

How to Apply:

- If you are interested in my lab, please fill out the <u>Recruiting Form</u>. TOEFL/IELTS and GRE are required for applications. If there is a good match, I will contact you via email for interviews.
- If everything goes well, please apply <u>online</u>. Reminder. Apply for PhD instead of EngD;
 Source of Finance: NUS research scholarship or others if you have your own source;
 select me as your proposed supervisor.

Chinese



CoSTA@NUS实验室招生

关于 **CoSTA@NUS**实验室:

- 认知科学与可信人工智能(CoSTA@NUS)实验室坐落于"认知海岸线"——人类思维与机器智能交汇的前沿。实验室致力于在认知科学的指导下, 秉持安全、道德创新的承诺, 探索人工智能的未知水域。
- 人工智能的认知科学: 我们旨在通过认知心理学和神经科学的视角, 理解人工智能系统的内部运作和脆弱性。
- 服务认知健康的人工智能:我们利用人工智能来增进对认知障碍的理解和治疗,并模拟认知症状。
- 人工智能安全:我们致力于开发用于负责任且可解释的人工智能安全的基础计算方法,包括风险量化和控制。

关于PI:

洪骏远博士是新加坡国立大学<u>电气与计算机工程系</u>即将上任的助理教授,目前在<u>麻省总医院</u>和哈佛医学院从事研究工作。此前,他曾是德州大学奥斯汀分校的机器学习基础研究所(IFML)的博士后研究员,导师是Atlas Wang博士。他被评为2024年MLSys新星之一,并获得了VLDB 2024最佳论文提名,他的一些工作还被白宫和密歇根州立大学研究与创新办公室报道。

职位空缺:

- 实验室提供2-3个全额资助的博士职位(奖学金/助研, **2026**年秋季入学)。对于优秀的学生,我很乐意提名/推荐您申请总统研究生奖学金(PGF)、AISG博士奖学金以及其他机构提供的奖学金,如A*STAR奖学金、SINGA等。详情请访问新加坡国立大学奖学金网站。
- 如果您有兴趣在我们的实验室攻读博士学位,有多个远程实习机会。

关于新加坡国立大学ECE系:

新加坡国立大学<u>电气与计算机工程系(QS2025</u>排名第4),隶属于充满活力的设计与工程学院 (CDE),提供世界一流的环境,处于电子、计算、机器人、物联网和可持续技术创新的前 沿。

我们提供:

- 前沿研究的个性化亲身指导。许多之前的<u>受指导学生</u>在ML/NLP顶级会议上发表了10+篇论文, 并获得了行业工作。
- 合作机会:有机会与全球顶尖大学(新加坡国立大学、德克萨斯大学奥斯汀分校、哈佛大学、密歇根大学、伊利诺伊大学厄巴纳-香槟分校、麻省理工学院、普林斯顿大学等)的领先研究人员合作。
- 计算资源:大学集群(<u>48个H100 GPU, 102个A40 GPU</u>)。更多实验室资源将在2026年秋季提供。

我们寻找的人才:

我们正在寻找在人工智能/机器学习、认知科学(神经科学 | 心理学)或相关领域有扎实背景的人才。理想的候选人应具备:

- 出色的解决问题(编程或数学)和分析能力。
- 独立工作能力和良好的协作沟通能力。
- 符合奖学金资格(即扎实的学业记录)的候选人将优先考虑。
- (可选)展示出研究经验和对相关论文的见解。

如何申请:

- 如果您对我的实验室感兴趣,请填写<u>招聘表格</u>。ECE系要求申请者提供TOEFL/IELTS和GRE成绩。如果匹配度高,我将通过电子邮件与您联系进行面试。
- 如果一切顺利, 请<u>在线申请</u>。提醒:请申请博士(PhD)而非工程博士(EngD);资金来源选择新加坡国立大学研究奖学金或您自己的其他来源:请选择我作为您的拟任导师。